

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A preamplifier circuit for amplifying the electrical signal from a condenser microphone transducer, comprising:
 - a series capacitor between a condenser microphone transducer output and [the] a DC input of an amplifier, wherein the amplifier includes an input impedance circuit, including a pair of cross-coupled, small area PN junction diodes, which sets the input impedance of the amplifier as substantially equal to or greater than 1 GigaOhm.
2. (Original) The preamplifier circuit according to claim 1, wherein the capacitor reduces current leakages by blocking a DC path from the condenser microphone transducer to the amplifier input.
3. (Original) The preamplifier circuit according to claim 1, wherein the amplifier is integrated as a monolithic chip and the capacitor is provided externally.
4. (Original) The preamplifier circuit according to claim 1, wherein the amplifier and the capacitor is integrated as a monolithic chip.
5. (Original) The preamplifier circuit according to claim 4, wherein the monolithic chip is made in a modern IC technology comprising one of: CMOS, JFET, P- or N-type MOSFET, and MESFET.

6. (Original) The preamplifier circuit according to claim 1, wherein the capacitor is a low leakage, floating plates type made as a polysilicon-to-polysilicon capacitor compatible with modern IC technology.

7. (Original) The preamplifier circuit according to claim 1, wherein the capacitor is a low leakage, floating plates type made as a polysilicon-to-metal capacitor compatible with modern IC technology.

8. (Original) The preamplifier circuit according to claim 1, wherein the capacitor is a low leakage, floating plates type made as a metal-to-polysilicon capacitor compatible with modern IC technology.

9. (Original) The preamplifier circuit according to claim 1, wherein the capacitor is a low leakage, floating plates type made as a metal-to-metal capacitor compatible with modern IC technology.

10. (Original) The preamplifier circuit according to claim 1, wherein the capacitor is a low leakage, floating plates type made any combination of polysilicon or metal as one plate and any combination of resistive or conductive layer as second plate, all compatible with modern IC technology.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The preamplifier circuit according to claim [11] 1, wherein the input impedance of the amplifier is set as substantially equal to or greater than 100 GigaOhms.

14. (Currently Amended) The preamplifier circuit according to claim 1, wherein the [amplifier comprises an input] impedance circuit, [including] further includes a resistor, which sets the input impedance of the amplifier.

15. (Cancelled)

16. (Original) The preamplifier circuit according to claim 1, wherein the preamplifier circuit amplifies an electric signal from an electret condenser microphone (ECM).

17. (Original) The preamplifier circuit according to claim 1, wherein the preamplifier circuit amplifies an electric signal from a silicon-based condenser microphone.

18 - 33 (Cancelled)

34. (New) Miniature microphone comprising a preamplifier circuit according to claim 1.